INDEX TO THE NINETEENTH VOLUME

OF THE

MINING JOURNAL.

A.

Accidents in Mines, Richardson on, 14, 194, 305; on Railways, compensation for, 26
Abergwesain Silver-Lead Mines, 30, 278, 403, 488
Agricultural Chemistry, 10, 22, 34, 46, 70
Atmospheric Railway Propulsion, 35; Bragg's, 453
Australian Agricultural Company, 38
Aneroid Barometer, the, 59, 82, 123, 134, 158
Abattoirs of Paris, description of, 62
Atlantic and Pacific Steam Trading Company, 69
Anthracite Coal in Pennsylvania, 84, 92, 120, 141, 433
Anti-friction Wheels for Railway Carriages, 86
Albion Plate Glass Company, 99
Anna Maria, Wheal, 116
Argand Lamp, improved, 124
Australian Mining Company, 129, 368
Andrew and Nangles, deep adit, 129
Alfred Consols, 130, 393, 453
Amsterdam Waterworks Company, 133, 147, 235
Anthracite, Leighton and others on the Use of, 135; in locomotives, 147; several communications on, 158, 170, 227, 338
Acland, Wheal, 140
Anderton, Wheal, 142, 441, 574
Ærolites, Murray on, 158
Alkali Works. Prospects of our, 162
Aberdeen Railway, 171, 346
Accidents from breakage of Ropes, Heath's Apparatus, 193; Fourdrinier's, 344, 346
Air-Pump, Siemen's Patent, 199
Assurance Policies, sales of, 209
Austria, Mining Industry of, 207, 430, 444
Adelaide Mining Company, 214
Ægis Life Assurance Society, 235
Air-Pump, Radley's Patent, 242
Acids, Improvements in Manufacture of, 250
Altan Mining Company, 250, 572
Atmospheric Locomotive, 254
Archimedian, or Worm Stove, 260
Antimony and Silver-Lead Mining Company, 273, 296, 309, 318, 332, 357
Ayrshire, discovery of Minerals in, 284
"Anglo-Celt" on Irish Mines, 199, 222, 318
Asturian Mining Company, 321, 370, 385, 417, 429, 453, 454, 476, 500; "Mark Anthony" 511, 513; Special Meeting, 573
Accidental Death Assurance Company, 342
Australia, Steam Communication with, 344
Alfred Life Assurance Company, 355
Anglo-Mexican Mining Association, 381, 404
Agricultural Chemistry, Ryan's Lecture, 386
American Whitewash, to make, 402
Arthur, Wheal, 402
Atmospheric Traction, Piatti's Compressed Air, and General System, by Baggs, 423, 435, 447, 459, 471, 483, 495, and further Nos.
Air-Engine, Heated, Bogue's Patent, 444, 494, 506, 542, 602, 615
Appold's Centrifugal Pump, 475
Air-Pump, improved, Bickle's, 475
Alum Trade and Works of England, 487
Australian Coal, 504
Asphalte of Seyssel, 505
Aerial Navigation to California, 517
America, Steam-Engines in, 535
Auriferous Sands of New Granada, &c., 553
Audit of Railway Accounts, 556
Ant, Red, Plague in London, Murray on, 567
Australia, Review on Mining in, 579

B.

Breakwaters, New Mode of Constructing, 2
Budd, Mr., Letters and Replies, 5, 7
Banfield, T. C., his Papers, 9, 111, 233, 277, 286, 325
Bourne, on the Steam-engine, 11
Building Societies, Law of, 18
Bridge, Sadler's Patent Balance, 21
Bank of Australasia, 28, 163, 306
Bessey Iron and Charcoal Company, 38, 47, 58, 70, 81
Blaenavon Iron-Works, 51, 165, 185, 199, 212
Buckette, Wheal, 41
Bismuth, Polarity of, 59
Barossa Range Mining Company, 53, 89, 417, 584
Blencowe, Wheal, 55, 213, 370, 619
Basset, Wheal, 65, 166, 476, 597
Bardsley Colliery, Winning, 69
Ballicastle Collieries, 69
Bristol and Exeter Railway, 76, 99
Boydell, *on Landed Property* (review,) 76, 118, 171
Balloon Railway for California, 83
Balmoon Consols Mining Company, 93, 476
British Empire Mutual Life Assurance Company, 99
Bell, Wheal, 101, 199
Ballisweden Mine, 116, 213, 321
Bedrick Consols, 116, 509
Bituminous Shale Company, 116
Blast Furnace, the Bellows Superseded, 120
Brush, Painter's, Metallic Bound, 123
Birmingham Plate Glass Company, the, 128
Birch Tor and Vitifer Mines, 130, 286, 441, 538
British Bank, the, 133
Bogue, John, Memoir of, 135
British American Land Company, 150
Black Craig Mine, 154, 189, 200, 210, 249
Brocden Gold Mines, 154, 165
Bagwen Iron Company, 163, 190, 442, 454, 472, 548
Barra Barra Mine, 163, 362; Burr, Mr., 214
Bedford United Mines, 164, 321, 561
Bon Accord Mine, South Australia, 165
Benny, Wheal, 176, 226, 434
Brazilian Mining Company, 179
Banca Tin Mines, 179; Island of, 194
Bram's Miners' Lamp, 183
Brazilian Mines, Slavery in, 190 [606
Beaufort Duke of, v. Sir John Morris, Mining Case, 192, 553, 595,
Bridges and Girders, Improvements in, 195
Britannia Bridge, the, 217, 229, 283, 305, 315, 375, 406, 435, 443, 451, 493, 495, 563, and further Nos.; Concert at, 255; Raising Tubes, 373; Review, 378; Report, 394.
Boiler Deposit, on, and Means of Prevention, 210, 475; Incrustation, 623
Bryant, Capt. James, Death of, 226
Blackwall Railway, Sale of Engines, 229
Bank of Australasia, 235
British Copper Smelting Company, 238
Birkmyre, on Gold and Gold Mines, 266, 290
Bank of British North America, 270
British Commercial Life Assurance, 270
Blasting, Improvements in, and law case, 274
Bank Charter Act, and Industrial Interest, 9, 111
Bengale Gas, or Air Light, Mansfield's, 186, 290
Bolanos Mining Company, 297, 309, 333, 348, 369, 404, 465, 511, 562
Botallack Mining Company, 321
Bridge, a, Built in a Week, 331
Bank Notes, New Water Marked Paper for, 332
Bray, Wheal, 334
Burlton Consols Mining Company, 345, 573
Bu[illegible]ston's Colliery Ventilator, 349
Bru[illegible] Suspension, at Chester, 367
Bridge[illegible] Consols Mine, 402
Blisland [illegible]ology of, 406
Biscay, Ge[illegible]le Making Machine, 414
Brick and T[illegible]spratt's, *Prosser on*, 422, 549
Blow Pipe, Mi[illegible] Lamp, 439
Bram's Safety [illegible]n-Works, 442
Briton Ferry Iron [illegible] Bridge, 442
Berwick Railway [illegible] for the Advancement of Science, 444, 450, 474
British Association [illegible] Company, 466
Bryn-Arian Minin[illegible]chinery, 490, 562
Biscuits made by M[illegible]509
Bedminster, Coal at, [illegible]achinery, 507
Brotherton's Oils for M[illegible]s, 553
Brazilian Mines, Machine[illegible]ry in, 553
Bricks, Tempering Clay, M[illegible]ry for, 553
Baynard v. Tremayne, 560
Blackford v. Richards, 560
Balloon to Discover Franklin, 567
Balloon to Discover Franklin, 567
Brunel, Sir M. I., Death and Memoir of, 594
Brine Stream at Droitwich, Discovery of, 597
Bawden, Wheal, 619
Bentry Silver-Lead Mine, 618

C.

Callington Mines Company, 5, 153, 321, 430, 489
Caradon, West, 5, 16, 101, 226, 321, 525, 560, 619; Wheal Hooper, 116, 237, 356, 525; South, 40; Copper, 77, 89, 333; United, 416; District, the, 30, 249, 260, 526
Craddock Moor Mine, 5, 101, 225, 321, 430, 525, 619 [382
Chester and Holyhead Railway, 6, 130, 154; Review, 343; Finance,
California, Gold Deposit of, 8, 20, 43, 45, 63, and further Nos.; Wyld's Map, 24; Minerals, Pearls, &c., of, 59, 60; Pariby's Map, 68; Tennant's Paper on, 74; in Belgium, 193; Gold, Quality of, 193; Money, Leader on, 421
Cameron's Coalbrook Steam Coal Company, 8, 15, 23, 28, 50, 71, 90, 271, 310, 375, 385, 390, 544, 619; law case, 20; letters on, 38, 46
Collieries, Joint-Stock, in South Wales, 10, 22
Cornish Railways, the, 10, 30, 35, 47, 70, 76
Chemistry, Agricultural, 10, 22, 34, 46
Colliery, Important Law Case, 16
Copper Ores, Quarterly and Annual Produce of, in Cornwall and Swansea, 21, 142, 169, 325, 361, 396, 489, 483
Combined Vapour Engine, 23, 171, 242
Clarke and Varley's Atmospheric Railway, 23
Consolidated Mines, 30, 238, 466, 574
Cwm Erfin Mine, 30, 417, 523, 574; Francis's Letter on, 596
Copper Trade, the, 30, 46, 54, 58
Cornwall Railway, 30, 35, 103, 147
Cunningham and Carter's Railway, 35, 107, 128
Cobalt Mines, Cumberland, 42, 53, 65, 176; Trade, the, 166; Modum, 350; Indian, 318, 368; its Salts, 507
Craddock's Improvements in the Steam-engine, 58, 70, 82, 120, 303
Cost-book System, on, 77; Transfer Forms, 346; Principle and Practice, 487
Curtis, Wheal, 77, 430
Cork Steam-ship Company, 78
Commercial Bank of England—Manchester, 87
Comblawn Mining Company, 89, 166, 262, 496
Caledonian Railway, the, 99
Cavendish Society, the, 98
Clerical, Medical, and General Assurance Society, 99
Copiapo Mining Company, 101, 356
Condurrow Mining Company, 101, 189, 224, 297, 405, 501, 564
Copper, Native, in America, 102
Comfort, Wheal, Mining Company, 116, 572
Coal Trade, the, 130; American, 421, 481; French, 455
Cosheen Mine, Abandonment of, 130
Coal, Improved Exports of, 142; Discovery of a new Seam at Sydney, 142; Working, on, 150
Carn Brea Mining Company, 152, 609
Carthew Consols Mining Company, 153
Copper Miners in England, Company of, 162, 190, 261, 267, 349
Catherine, Wheal, 166
Copper Sheathing, on, 170, 182, 194, 205, 207, 218, 230, 278, 291, 302, 315, 326, and further Nos.
Chisels and Gouges, Improvements in the Manufacture of, 174
Calestock, Wheal, Mining Company, 179, 429, 549
Copper, Government Contract for, 181; for French Navy, 181
Coal Trade, Custom-house Instructions, 181
Colombian Mining Company, 182
Coal Mines, Fires in, 210, 230, 265
Colonial Government, 193
Compressed Air-engine Company, 207
Cornish Steam-engines, Returns of, 213
Camborne Consols Mine, 238, 526, 537
Coke Ovens, Improved, 241, 454
Chloroform—a Motive Power, 253
Carbonic Acid Engines, 267
Church of England Life and Fire Assurance, 271
Canals, History of, 283, 294
Cotton, Seperating Seed from, 294
Chili, Mining in, 301, 308
Copper Smelting, Improvements in, 310
Cronbourg, Mine of, 313
Coal Mining 300 Years ago, 330
Cefn Cwsc Iron-works, 342
Charcoal, Preparation of, by Steam, 354
Commercial Bank of London, 355
Coals for the Steam Navy, 361, 374
Coxworthy, Franklin—his Discoveries, 367, 387, and further Nos.
Chili, Discovery of Silver in, 382
Criminals, Employment of, in Mines, 390
Collieries, Strikes in, 394, 457, 574
China, Mineral Wealth of, 416
Coombe Valley Slate Company, 429, 586
Cubert, Wheal, 430
Chronometers, Return of Manufacture of, 474
Copper, Phosphorised, and other sorts, Action of Sea Water on, 474
Compass, Bar, Improved, C. F. Bellows, 475
Cobre, Consolidated Copper Mines of, Association, 492
Coal Exchange, the New, 499, 523
Chain Links for Cables, 552
Cavern in Wales, Discovery of, 507
Cuba, Copper Mines of, 510
Clarke and Motley's Railway System, 519
Creeglace Mine, 525
Coal—Increase of Consumption in London, 553
Coal Pit on Fire, 210, 230, 266, 562
Cerro del Bote Mining Company, 546, 595, 601
Concord, Wheal, 597
Cartridge, Copeland's New, for Blasting, 576, 603
Cadmium, Importation of, 610

D.

Drainage of London, Great Plan for, 14
Derwent Iron-Works, the, 11, 15, 550, 562
Devon and Courtenay Consols, 41, 130, 549
Darley Main Colliery Explosion, 49, 53, 57, 66, 78, 80, 82
Dublin and Belfast Junction Railway, 64, 74
Damascus Blades, Manufacture of, 74
Dartmoor Mining District, 78, 429
Dia-Magnetism, on, 87, 98
Dean Forest, Coal Mining in, 90, 100
Diamond, Opal, G. A. Mantel on, 93
Dunn, Matthias, on Colliery Working, 110
Devil's Dyke, Elevation of, above the Sea, 112
Devon Great Consols, Trespass, 154, 225, 241, 536
Depth of Coal and other Mines, 171
Drake Walls Mining Company, 175
Drilling Metals, Improvements in Machinery for, 190
Dulsburg Iron-Works and Mines, 199, 210
Duties on Transfer of Shares, Evasion of, 202
Direct London and Manchester Railway, 202
Duties on Metals in Spain, Reduction of, 202
Dean's Diving Apparatus, 231
Direct Northern Railway, 267
Dilapidations and Nuisances, Law of, (review), 279
Dry-Rot, Extraordinary Instance of, 283; Burnett's, 302 [602
Diamond, Cutters, &c., on, 291; Baggs on, 507; Murray, 575, 591,
Dividends on British Mines, 322
Duchies of York and Lancaster Revenues, 349
Dividing Engine, Alfred Phillips's Improved, 475
Diamond Rock, the, and other Poems (review), 546
Droitwich Salt Manufacture, 558
Directors, Warning to, 562
Direct West-end and Croydon Railway, 579
Direct London and Exeter Railway, 582
Disc Engine, the, Application of, to Marine Purposes, 598
Direct Exeter, Plymouth, and Devonport Railway, 598
Direct Manchester, Leeds, and York Railway, 598
Drilling Machine, Stone Improved, 607
Dakin v. Brown, Coffee Roaster Boiler Explosion, 613
Explosions in Collieries, Darley Main, 49, 53, 71; Richardson's Paper, 85; Middle Patricroft Colliery, Dr. Dunn on, 113; Dr. Dunn, 130; Count de Werdinsky, 131; Hebburn, 274, 286; Friary Colliery, 320; Aberdare, 394, 399, 402; Little, 433, 445; Jones, 423; Crane, 434; Clanny, 435

E.

Explosions in Steam-Boilers, 42, 113, 127, 140; at Preston, 151; A. Dunn, 252, 235, 243; 560; Dunn, 594
Exmoor Wheal Eliza, 17, 88, 193, 272, 309, 490, 442
Electric Light, the, 6, 10, 20, 23, 30, 82, 93, 106; Lime, 140; Opera, 202; Staite's Specification, 20, 113, 160, 183, 238, 264; Holmes on the, 34; Pearce's Patent, 409; Specification, 418; Le Molt's Specification, 44, 47, 95, 105, 138; Challenge, 254; Melancholy and Curious Accident, 78; Allman's Patent, 154
East Tamar Consols, Silver-Lead Mine, 17, 82, 453.
Electric Clocks, on, 106
Eastern Archipelago Company, 71, 380
Electricity, Noad's Lectures on (review), 294
Electricity, Materiality of, 76; Faraday on, 198, 245, 258, 270, 282, 294; Becquerel, on, 442
East Pool Mining Company, 89, 190, 514
Electro-Motive Power, 93
Explosion in Regent's-Park, Murray on, 94
Europe and America, Electric Telegraph between, 95
Equity and Law Life Assurance Society, 99
East Wheal Agar, 101
East Wheal Rose, 101, 149, 296, 321, 536, 596; New Quay, 430
East Shepherd, 116
Economic Life Assurance Society, 127
East Wheal Crofty, 142, 154, 250
East Birch Tor, 142, 358
East of Scotland Malleable Iron Company, 142
East Godolphin, 177, 356
East India Railway, 181
Eglinton Iron-Works, 190, 502
Egypt, Mining in, 211; Coal in, 428
Eastern Counties Railway, 222
Economy of Working Mines in Cornwall, Sims, 225
England and Brazil, Comparative Mining in, 238
Envelopes, Machine for Manufacturing, 253
Eyam Mining Company, 301
English Channel, Valley of, 308
East Crowndale Mining Company, 333, 334
Ennis, Wheal, 358
Electricity, Little on, 398, 415, 426, 439; Highton, 608
Exhibition of Arts and Manufactures at Birmingham, 417
Enamel for Iron, 427
Elizabeth, Port, Mines at, 442
Expansion of Liquids by Heat, 495
Exchange, Bills of, Origin of, 493
Eggs, Sex of, 498
Exhibition of Universal Industry in, 1851, 499, 504, 540
Engine, Steam, a New, for Trying Lodes, 518
Electro-Chronograph, the, 543
Esgair Llee Mining Company, 574
Equitable Assurance Company, 589
Eaglesbush Colliery Explosion, Struvé's Ventilator, 603
Esculapian Still and Condenser, 606
Electric Telegraph, on the, Company, 76; Henley and Foster, 87; Lake, 93, 103, 113; Ricardo, 116, 198; to and in America, 133, 134, 222, 318, 558, 613; Law Case, 166; Cost of, 202; Under Thames, 241; Siemen's, 258; Ireland, 295; Copying, 298; Willmer and Smith, 462; Whishaw on, 450, 463; Spain, 455; Prussia, 486; Lomond, 410; Antiquity of, 613; on the, 15, 47; Experiments at Folkestone, 21; Highton's Lecture on, 62; New Printing, 75
Electro-Magnetism as a Motive Power, Hjarth, 217, 231, 242, 254
East Buller Mine, 574 [290, 373, 375, 578
Explosion of Combustibles, Dr. Murray on, 623

F.

Fortescue, Wheal, 17, 30, 189, 562
Frances, South Wheal, 29, 116
Friendship, East Wheal, 30
Foliage, Functions of, 34, 23, 46
Furnace, Grist's Revolving, 83; Newcomb's, 349; Wright's, 187, 487; Wilson's 481; Coad's 510
Fowey Consols Mining Company, 89, 152, 309, 525 [127
Fire-proof Buildings, Fairbairn on, 98; Braidwood 112; Nasmyth,
Fumes Metallic, Condensation of, 99 [Martin, 129
Flooding a Colliery, Friar *v* Grey, 102; Philpott's *v* Evers and Flute, Patent Diatonic, 105
French Patents, Payment of Dues on, 127
Fossil Sigillaria, Paper on, 150
Francis, Capt. W., Death of, 151
Free Trade, Birkmyre on, 158
Faults and Gases in Collieries, 170
Four Months among the Goldfinders in California, 174
Fermentation, 182
Falmouth Water-works, 180
Fuel, Economy of, 187
Fumific Impeller, Gordon's, 198, 343
Franco, Wheal, 202, 273
Fire in Mr. Darlington's Coal Mines, 210, 230, 266
Floating Railway Bridge on the Tay, 217
Furnace and Boiler, Design for, 260 [346
Fourdrinier's Coal Pit Safety Apparatus, 284, 286, 303, 310, 339,
Fires in Chimnies, to Extinguish, 327
Fletcher, Testimonial to Mr., from Coal Trade, 346
Forth Marine Assurance Company, 348
Fines in Factories, Legality of, 354
Fossil Ape, 378
Freyburg, its Mines and Smelting, 387
Fumigation of Sewers with Chlorine, 399
Fire Annihilator, Phillips's, 462, 486, 555
Foot-prints, Fossil Reptilean, 451
Fossiliferous Rocks of the Liskeard District, 486
Franklin, Sir John, Rescue of, 496, 567
Foreign Mines, Position and Prospects, 505
Flora of the Coal Formation, 516
Forest of Dean Railway, 523
Food, Chemistry of, 543, 555
Flour, Adulteration of, 555, 567, 603, 615

G.

Gonamena Mine, 5, 17, 101, 226, 321, 430, 525, 619
Gold Deposits, on, 6, 15, 19, 34, 58; Murray, 94, 107,; France, 142; Melbourne, 247, 262; Peru, 260; Sarawack, 284; California, 302; Wicklow, 486
Geological Society, Proceedings at, 15, 186
Gwinear Consols Mining Company, 17
Gas, White's Patent, Hydro-Carbon, 24, 131, 151, 307, 339, 351, 475
Great Polgooth Mining Company, 30, 142, 249, 345, 346, 466
Gold Mines in England and Wales, 33, 69, 94
Gold Regions of California (review), 39, 195
Gold Seeker's Manual, by Ansted (review), 45
Great St. Just Tin and Copper Mining Company, 51
Guadalcanal Silver Mines at Seville, 52, 75, 142, 261, 441, 578, 660
Great Rough Tor Consols, 53, 76, 153, 249, 466
Gold in South Australia, 53, 89; Egypt, 63
Government Inspection of Mines, on, 68, 69, 80, 81, 82, 88, 94, 107; Hopkins's, 134, 163, 202, 325, 350; Richardson, 121; Dunn on, 122, 302; Instructions on, 310; Wyld's Bill, 331, 338
Gold in Scotland, 75
Great Western Railway, 76, 458, 559, 598
Great Western Docks, Plymouth, 76, 416, 427
Gold in Bengal, 78; in Maryland, 166; Central America, 442
Geological Society, Anniversary Meeting of, 78
Gold of California; Analysis of, 81; Norway, 371; from Silver, Separation of, 81 [142; Mansfield's New, 186
Gas-Light, Advantages of, 87; Portable Naptha superseded, 114, Germany, Mining in, Tremenheere's Report, 88 [202
Gas Companies' Monopoly, Movement to Reduce, 88; Defries', 139,
Gadair Mining Company, 101
Gurney, Goldsworthy, Steam Ventilation, 105; Sewers, 495
Glass, Coloured, Germination of Seeds under, 107
Gun Cotton, on, 107 [tricity, Discoveries in, by Smee, 116
Galvanic Apparatus, Use of Charcoal in, Simplified, 114; Electro-
Gold, Experiments to Produce, 120, 133, 147, 158, 170, 187, 244
Great Britain, Sale of the, 126
Glass, Manufacture of, for Optical Purposes, 127
Granite, Calcined for Potter's Clay, Pipes, &c., 430
German Mining Company, 131, 579, 606 [of, 458
Gutta Percha Company, 144; Strength of Tubes, 327; New Kind
Gold, Adulteration of, 147
Granite, Potash from, 151
Gas, English's Patent Camphine, 166
Gutta Percha, 176, 178; Tubing, 195
Grimsby Docks, Royal Visit to, 178
Gold Deposits and Washing, 187
Glass Trade, 186, 350; Soluble, 307
Grand Surrey Dock Canal Company, 195
Glamorganshire Iron and Coal Company, 222
Gelly Gaer Colliery, Experiments in Ventilation, 226, 238
Glass Silvering by Gun-Cotton, 228 [346
Gas Engineers, Institution of, 230; Burner, Self-Lighting, Strode's
Gold and Silver, Fluctuations in Value, 250
Great Work, 262, 586
General Mining Association, 273, 286
Glossary of Terms used in the Coal Trade, Northumberland and Durham (review), 279

Emigration to Natal & Port Beaumaple 380

Guilly annual 361

Gas, Bensole, or Air-light, Mansfield's, 186
Grambler and St. Aubyn Mines, 286, 490
Galvanic Battery, Constant, 303
Galvanized Iron Company, 334, 514, 574, 612
Gas Lighting, Progress and Advantages, Rutter's (review), 339
Gold, Babbit's Improvements in Separating, from the Ore, 344
Greenhow's Additions to Clarke and Varley's Railway, 346
Gun Shot, Self-heating, 406
Girvan Copper Mines, Scotland, 429
Gold, British, Stirling's, 433
Glass, Improvements in Manufacture, Obed Blake, 438
Gold, Distribution over Surface of Globe, 450
Gauge, Eccentric for Wire, Metal, &c., 450
Geological Strata of the Metropolis, 474
Gas, Spontaneous Evolution of, at Charlemont, 474; Illuminative Power of Different, 423; from Grape Skins, and Wire Less, 481
Gold, Brazilian, in Calcareo—Siliceous Matrix, 486
Geology, Cornish Additions to, 486
Gresham Life Assurance Society, 498
Godolphin, East, Mining Company, 525
Glass, Coloured, to see through in Fogs, 531
Gold Mines of Siberia, 534
Great Western Fishery Company, 534
Galvanic Electricity and Animal Life, Smee on, 543
Grand Union Canal, 544
Grimsby Docks, Coffer Dam at, 546, 559
Great Western Railway of Bengal, 553
Glow-worm, the, Dr. Murray on, 567
Grand Junction Canal Company, 589
General Annuity Endowment Association, 601
Gold in Flintshire, 613.
Garth Iron-works, the, 622
Geology, Leader, King's Lecture on, 622

H.

Hunt's, R., Lecture on the Poetry of Science, 2, 23, 26, 34, 46
Hopkins, Evan, on Metalliferous Deposits, 9
Harbour of Refuge, Sea Wall Question (review), 39
Herodsfoot Lead Mine, 40, 77, 237, 309, 586
Holyford Copper Mining Company, 53, 369
Handbook of Chemistry, Gmelin's, (Review.) 62
Hardy's Patent Axles, Extension of Patent, 74, 87
Hawkmoor Mining Company, 101, 418, 474, 516
Heigneton Down Mining Company, 116, 225, 333, 549
Hydraulic Engines, on, 127
Historical Recollections, Bagnall, 135
Holmbush Mining Company, 153, 429
Hostilities between Danes and Germans, 192
Heaves, or Dislocations by Flookans, 194
Hydraulic Telegraph, on the, 198
Hutchison's Indurated Materials, 202, 295 [374
Hungarian Tariff, New, and Commercial Market, 253, 277, 286, 325.
Holliday *v.* Fawcett (law case), Naptha Gas, 331 [601
Horsley's Patent for Purifying water, 327; Specification, 519, 529,
Hudson, G., his Railway Speculation, 334; Institution of Legal Proceedings against, 343
Huddersfield and Manchester Railway, 378
Huron Mines, and Chippewa Indians, 385
Holne Park Mining Company, 394, 561
High Level Bridge at Newcastle, 406
Hennock Iron and Tin Mines, 442; Silver-lead, 430
Haarlem Lake, Drainage of, 442
Hydro-Electric Machine, Armstrong's, 451
Hydraulic Machine for Draining Mines, 474
Hygenic Washing and Bleaching Establishment, 498
Haig's Improved Air Blower, 555
Harvey *v.* Freeman, 560
Hodge *v.* Kirkman, 560
Hall of Commerce, Sale of, 562

I.

Iron and Carbon, 11, 135, 518, 529, 542, 590, 623
Iron, On—Trade, 11, 47; the Scotch, 11, 54, 481; the Americas, 178, 181, 342, 346, 385, 490, 517, 531; Maryland, 445; Tubes, Patent for (law case), 21; Cast, Large Sales of by Auction, 26; on, Mitchell, Mushet, Radlinski, and others, 34, 120, &c.; Contracts for (law case), *in re* Donald Maclean, 39; Works, Improvements in, 51, 70, 81, 82, 90, 93, 262, 373; Leighton on, 107, &c.; Deeley, 307; Burden, 382; Warehouse for California, 63; Blewitt's Refined, 119; Ladders for Mines, 146, 158, 170; Plates, Machine for Bending, Turton's, 151; Steam-Ships as Vessels of War, 206, 243, 291; Masters' Quarterly Meetings, 178, 491; Manufacture of, Stirling's Patent, 190; Hardware and Metal Pension Society, 190, 265, 600; Soldering Wrought with Cast, 217; Improvements in Treating Oxides, 219; Houses for California, 223, 421, 455; Anthracite, Unprecedented Make, 261; Contract, Alleged Breach of, 267; Rolling Bars for Suspension Bridges, New Method, 270; Girder, Rutter's 295; Tube Girders for Bridges, 315; Rolling, Improvements in, Clay's, 298; Zincing of, 325; Screw Propellers, Malleable, 337, 351; Pipe, Improved, Chameroy's, 373; Manufacture, Lancefield Forge, 380; Tremenheere's Returns, 397; Galvanised, Rotin, 403; Anthracite in America, 433; Magnetic Power of, and its Products, 440; Roofing at Liverpool Railway Station, 442; Cast, Stirling's Toughened, 445; Works, Consett, Northumberland, 445; Management of, Rogers on, 433, 458; Vessels, Preservation of Bottoms of, 462; on Phosphorus, prodncing Cold-Short, 451; the Finer Sorts, and Steel, as Applied to Guns, Swords, &c., 463; Casting, Improvements in, 471; Analytical Investigation of, 474; Foundries of Newport, Visit to, 502, Business, Increase of, 510; Cast-Pipe Manufacturing, Stewart's, 535; Manufacture of, Direct from the Ore, 538; Works of Sussex, 547; Masters, Letter to, 552; Hot Air to Blasting, 553; Chemical Action on, 590; Trade, Meeting at Liverpool, 579; Warehouse, Monster, 595; Chemical Structure of, 602, 614, 615; Ores of Nova Scotia, 618; Trade, 623; Chemical Structure of, 623; Rails, Thorneycroft's, 623
Institution of Civil Engineers, 15, 27, 86, 98, 112, 186; Richardson, 158; *Conversazione*, 246; Annual Meeting, 608
Indicator for Steam-engines, M'Naught's, 26
Institution of Mechanical Engineers, 38, 222
Illuminated Glass Company, 47, 94
Irish Amelioration Society, 86, 92
Institution of Civil Engineers, Ireland, 86
Inventors and Patentees' Bazaar, 99
Irish Waste Land Improvement Society, 104, 154, 416
Ireland, Colonization, Bridge's on (review), 111; Rating Mines to Poor Rate in, 112; Railways, 116
Investment, Extraordinary, 112
India Rubber Springs for Rigging (Newall's Patent), 175
Injection of Woods, 183
Irish Mines, "Anglo Celt" on, 199; on, 222, 318; coal, 579
Imperial Brazilian Mining Association, 236, 241, 249, 548; Slaves, [453
Ionian Bank, 246
Irish Estates, Emancipation of, Muloch on, 245
Impious Practices of the Latter-day Saints, 265
Iberian Silver-lead Mining Company, 274
Indian Rivers, Steam Navigation on, 337, 344, 386, 474, 518, 530
Ice, Artificial, Masters's, 342
Islay Tontine, the, 366
Igneous Rocks of South Staffordshire, 451
Ivory as an Article of Manufacture, 451
Ink Stains from Linen, Removal of, 474
Ichthyolites of East Cornwall, 486
Ireland, Ancient Mines of, John D'Alton, 223; Mining Enterprise in, 247; Ancient Manufactures of, 295; Mining in, 423; Coal in, 562; Inland Navigation of, 498
Ince, near Wigan, New Colliery at, 498, 531
Iceland, Boiling Springs of, 510
Incombustible Fabric, 555

J.

Jews, Status of, in England, 24
Jordan's Wood Carving Machinery, 26
Joint-stock Collieries Companies in Wales, 33
Joint-stock Companies' Winding-up Act, 42, 102
Josiah, South Wheal, 333, 417, 454, 466, 476
Josiah, East Wheal, 417
Joint-stock Companies, List of, Winding-up, 517; Liabilities, 553

K.

Kapunda Copper Mines, 53, 65 [549
Keswick Cobalt Mines, 53, 65, 101, 115
Kingsett and Bedford Mining Company, 77, 224, 381, 393, 405, 417,

INDEX TO THE NINETEENTH VOLUME OF THE MINING JOURNAL.

Kinzigthal Mining Company, 189
Kamptulicon Company, 202
Knife Cleaner, Price's Patent, 210
Keene's Marble Cement, 243
Kirkcudbrightshire Mining Company, 249
Knowlys's Improved Furnaces, 301
Killingworth, Strikes and Riots at, 330
Kaw-aw Mining Company, 388, 853, 591
Kongsburg Silver Mines, 371
Kilbricken Mining Company, 505
"Kitting," Punishment for, 513
Kerry, Mineral Resources of, 555

L.

"Looker On," Letters and Replies, 5
Locomotives on Common Roads, 10, 23, 59, 82, 95, 107, 113, 121, 126, 154, 249, 255, 279, 459, 470; Tavistock, 277; Ramsbottom, 366
Light, Improvements in Producing, 11
Lead and Antimony, Separation of, 22
London and North-Western Railway, 26, 76, 550, 596; Dockray on Camden Station, 127
London and Westminster Bank, 27, 344
London Joint-Stock Bank, 27, 344
London Life Association, 28, 355
London and County Joint-Stock Banking Company, 50
London and South-Western Railway, 76
London and Gravesend Railway, 211
London Indisputable Life Policy Company, 286, 299
London in 1543, 591
Literary and Philosophical Society of Manchester, Memoirs of the (review), 38
Locomotive-engines; Improvements in, Johnson's, 39, 71; M'Connell's, 83; Sagers, 130; Want and Vernon, 151; American, 171; Werdinsky, 181, 194, 206, 219, 230, 243; Crampton, 198, 222; an Express, 222; Anthracite, 229; Marine, 230, 243, 254, 267; Headley's, 267, 298; Fell's Compressed Air, 277, 315, 339, 407; Hackworth, 445, 469, 491; Challenge, 514; Motley, 607; Compressed Air, 283
Lancashire, Geology of, 39
Lovel, Wheal, Joint-stock Companies' Winding-up Act, 42, 51, 57; Report, 226
Labuan, Borneo, Coal in and Advices from, 44, 271
Lelant Mining Company, 53, 297, 502, 513
Landore Viaduct, the, 90
Lake Superior Copper Mines, 102, 358, 488
Lead Ores, Improvements in Treating, 105
Lancashire and Yorkshire Railway, 113
Lootschen Valley Silver-Lead Mining Company, 415, 92, 129, 285, 322, 594
Llynmalcen Mining Company, 116, 166, 238, 333
Londonderry Mining Company, 116
Lead, Sulphate of, Reduction of, 116
Land, Revenues of the Crown, Return of, 132
Lanarth Mining Company, 142
Low's Patent Copper Company, 152
Lake on Pyrogen, 156, and 15 further Nos.
Lignite, Bovey, Experiments on, 157
Ley's Iron and Tin-Plate Works, 181
Liability of Railway Companies to Carry Coals, 193
Liquid Glue, 195
Lead Mines, the Bishop of Durham's, 202
Levant Mining Company, 226, 573
Light, Decomposition of, 230
Louisa, Wheal, 249
London, &c., Coal Consumers' Company, 266, 278
Life Associaton of Scotland, 282
Life Assurance, on, by A. Burt (review), 282
Lighthouses, History of, 258; Improvements in, 510
Linares Lead Mines, 294
Lealty Iron Mines, 318
Lowes Mining Company, 321
Legal and General Life Assurance Society, 322
Liability of Shareholders, Perry *v.* Hodge, 322; Apps *v.* the Peterborough Union Railway Company, 351
Lead Ore, Mr. Hunt's Annual Return of, 409
Leeds and Thirsk Railway, 421
Lostwithiel Consols Mine, 542
Lawrence, Wheal, 334
Lead, Solubility of, in Water, 340
Life Assurance, Profits on, 343
Lodes, Large, Best Method of Working, 346
Lighthouse for Cape Pine, 373; on the Godwin Sands, 339; Lamps, Improvements in, 403
Lead Trade, the, Letter to Producers, 409, 491
Liquid Metal, Remarkable Experiments with, 462
Lyons and Avignon Railway, 462
Laxey Mines, Testimonial to Capt. Rowe, 526
Labouring Population of Cornwall, 554
Law Relating to Mines, "Collier," 560
Lancashire Colliers, Strike of, 562
Law which Regulates Matter, the, 566
Lead, Improvements in Manufacture of Shot, 592
Life-Boat Catastrophe, Fatal, 602
Lancashire Colliers, Meeting of, 610
London and South-Western Railway, Charges against Directors, 605
Lamberooo Wheal Maria, 619

M.

Mary Ann, Wheal, 3, 65, 237, 393, 549
Mary Combs, Wheal, 5, 54, 101, 226, 430, 597
Mines and Metals, verses on, 9
McNaught's Double Cylinder Engine, 11
Mitchell, his Papers on Metals, 14, and further Nos.
Metal Trade, Statistics of, 18
Machinery for Lowering and Raising Miners, 21
Maria, Wheal, Tin Mine, 30
Maria, South, Wheal, 30
Metallic Deposits, on, 34, 46
Magellan, Straits of, Coal in, 47
Mineral Oil in a Coal Pit, 51
Musical Almanack, Cocks's (review), 62
Monmouth and Glamorgan Banking Company, 69, 95
Midland Railway Company, 76
Mine Share pledged, power to Sell, 89
Metals, Annual Returns of Exports and Imports, 98
Mining in Spain, 263; in Ireland, Legal Impediments to, 284; in Central America, 290, 361; in North Cornwall, 90; in the Cape of Good Hope, 200; in France, 274, 373; Company of Stolberg, 306; Encroachment on Crown Rights, 342; in New Zealand, 388, 466; in the Olden Time, 438, 453, 464, 519; in North Wales, 538; and Mines of Cornwall, from *Chronicle*, 570, 583; Interest, British, Mr. Sharp, 571; *Laws relating to*, Collins' (review), 577; Investments, Home and Foreign, 591, 603; Company of Ireland, 6, 17, 476, 321, 333; and Smelting, on, 34, 141; Injury to Land by, 102; Districts of Cornwall, Improvements in, 141, 308; Business, state of, 180; *Almanac*, 189; Speculations, increase of, 190; Home and Foreign, 566, 613; Industry, prospects of, 193, 229, 529; Laws of Spain, 205, 211, 229, 337; Investments, Home and Foreign, 623
Miners' Life Assurance, 94, 170; Provident Institution, 113
Margaret, Wheal, 101, 226, 574
Metals, Parliamentary Return of, 104
Marine Smoke Consuming Apparatus, 112
Marazion, Discovery of Copper Ore at Wellington Mine, 116
Midland Railway, 130
Mutual Life Assurance Company, 139, 355
Metals, Improvements in Bending, 140
Metha Mine, 140
Montreal Mining Company, 142
Mexican and South American Company, 164, 466
Mendip Hills Mine, 249; Destruction of Works, 180
Mexican Dividend, Schnieder's Conduct on, 199
Mueseler's Safety Lamp, 202
Music Hall, Store-street, Mr. Nichols's Dramatic Readings, 210
Mexican Company, The, 212
Magara Steam Frigate, the, 246
Mayo, Discovery of a Coal Mine at, 262
Marmato Mining Company, Alleged Robbery, 323, 342
Manuscripts, Illegible, Restoration of, 297
Magnetic Boring Machine, 354
Manslaughter, Charge of against a Coal Viewer and Engineer, 355
Monmouthshire Railway and Canal Company, 372, 421
Manual Power, Motley on, 411, 422, 435, 445
Muirkirk Iron Company, 458
Motions of Metals under Magnetism, 474
Manufactures, Proposed Grand Exposition of, in 1851, 490, 444, 476
Mahogany, Artificial, 484
Mary Emma, Wheal, 526, 536
Matter, the Law which Regulates, 542
Moon, on Viewing the, 562
Midland Grand Junction, 579
Motive Power, Lawes's Improvements in, 592
Mineral Court Tin Mine, 597
Metals, Compression of, Increases Weight, 594
Materials, Strength of, Buchanan on, 607
Mines and Miners of Cornwall, 614
Metropolitan Sewage Manure Company, 618
Mimprovements in Draining and Working, 622
Materials, Buchanan on the Strength of, 622
Metal for Gun Barrels, 622

N.

North British Australasian Company, 3, 8, 18, 442, 466, 537, 574, 595
Neath Abbey Iron Works, 21
Namur and Liege Railway, 54
Newquay and Par Railway, 69
Nickel Mines in Norway, 69
Notes on the Irish Difficulty (review), 76
Newall, Esq., Wire-Rope Patentee, Marriage of, 87
New Real del Monte Mining Company, 90, 101, 104, 129
North Pool Mining Company, 103, 213, 321, 417, 547; Watson, 114
New Brunswick and Nova Scotia Land Company, 114
Nasmyth's Fire-proof Flooring and Roofing, 137
Neath Harbour, Appointment of Pilots to, 2
Nister Dale Iron Company, 222
North Wales, Mining in, 222
North Wheal Friendship Mining Company, 235
Norway, Mining and Smelting in, 229
National Provincial Bank of England, 235
National Bank of Ireland, 246
National Brasilian Mining Association, 243, 250
North Roskear Mine, 249, 549
Nether Hay Colliery, Lancashire, (law case,) 274
Novel Carriage, Horses Inside, 277
Neuber's Liquid Glue and Varnish, 294
Nuisance from Chemical Works, Alleged, 355
North Staffordshire Railway, 361
Natal, Emigration to, 380
New Red Sandstone, Connection with Coal and Silurian Rocks, 451
Nova Scotia, Mining Company Monopoly, 493
Nothing New Under the Sun, 577
Nail Machine, Richards's, 576; Goose's, 592
Northumberland and Durham Coal-Field, 606
Nova Scotia, Iron Ores of, 618

O.

Ornamentation, New Style of, Whittaker's, (review), 62
Owners of Collieries, Rights of, Smith *v.* Kenrick, 74
Opal, Diamond, G. A. Mantel on, 93
Old Treleather Mine, 116
Old Spanish American Mining Companies, 154
Oak Farm Iron-Works, Sale of, 166
Outlines of Botany (review), 235
Old Wheal Prosper Tin and Copper Mine, 238
Oak, Wheal, Mining Company, 285, 358, 381, 526
Oxford, Worcester, and Wolverhampton Railway, 303, 469, 559
Ore Separator, Cook's Electro-magnetic.
Old Brimpts Tin Mine, 418, 444
Overland Route to the Pacific, 550
Oriental Bank, 601
Open Shafts and Truck System, 614
Ores, Quarterly Sales by Ticketing, 7, 169, 325, 430, 483

P.

Poetry of Science, The, Lectures on, 2, 23, 26, 34, 46, 59
Piers and Breakwaters, New Mode of Constructing, 2
Plymouth Wheal Yeoland, 6; East, 6
Par Consols Mine, 15, 430, 572
Propelling Ships, Improvements in, 19, 51
Porter's Corrugated Iron Beam, 21
Plantagenet Razor and Strop, 24, 301
Providence, West Wheal, 30, 202, 370
Panama, Isthmus of, Crossing the, 35, 75; Canal, 594; Railway across, 44, 64, 70, 156, 366
Pesth, Suspension Bridge at, 44, 211, 406
Paper, How to Split, 51
Penzance Consols, 53, 165, 286, 501
Pumping Water from Mines, Improvements in, 53
Peat Charcoal, on Use of, in Manufacturing Iron and Disinfecting, 55, 58, 70, 386, 391, 577, 591, 603, 615; as a Power, 375; *Bog, Origin and Reclamation of* (review), 295
Pressure Gauge, Improved, 58
Polytechnic Institution, Cotton Machinery at, 62
Penn Rocca Slate Quarry, 81, 579, 596
Professional Life Assurance Society, 87 150, 270, 306
Patents, Number of, in 1848, 95; Law Reform, 542, 555, 567, 623
Providence Mines, 101, 574
Pyro-pneumatic Stove, Pierce's, 130
Patent Laws, Treaties of Commerce, Laws of, 133, 147, 218
Punjaub, Wyld's Map of Actions in, 139
Paragreles on Railways, 147
Penhale, Wheal, 154
Pembrokeshire Iron and Coal Company, 154
Pyrogen, on, 156, 183, 195, 211, and in further Nos.
Pennant and Craigwen Mining Company, 162, 356
Perran St. George Mine, 170
Pitch Lake of Trinidad, 174
Provincial Bank of Ireland, 187 [411,
Patent Law Reform—Society of Arts, 188, 192, 198, 578; Campin
Provincial Bank of Ireland, 235
Pendleton Colliery, Fitzgerald's, 247
Public Works, Amounts Expended on, 202; of England, 258, 283, 294, 378
Peninsular and Oriental Steam Navigation Company, 258, 582
Par Consols, West, Mine, 286
Peace Society, Letter to, by Percival (review), 307
Parliament, Expenses of Houses of, 332
Pistons, Improvements in, 343
Pneumatic Lift, Gibbons's, 366
Pacific Steam Navigation Company, 385
Plymouth Great Western Docks, 76, 416. 421
Poisons, Domestic, Simple Remedy for, 422
Paragon Paint Company, 427
Pont Pean, Silver-Lead and Zinc, Pure, 440
Purple of Cassius, Manufacture of, 442
Pemberton, Leigh, Noble Example of, 442
Port Stephens, Harris's Guide to, 450
Pick, Miner's and Quarryman's Improved, 475
Popular Elementary Science, Weale's Dictionary of Terms, 546
Portsmouth Dockyard, Scientific Institution at, 546
Perforated Glass, Lochhead's, 554
Plastic Materials, Improved Manufacture of (Goodfellow's), 577
Pantheo; The Spirit of Nature, by R. Hunt (review), 582

Q.

Quebec Mining Company, 5, 142, 238, 360, 526, 661, 610, 622
Quenanger Copper Mines, 51
Quicksilver, Mines of, California, 59, 133; Spanish, 190, 205; Contract, the Spanish, 253; Mines of Spain, 551, 565; Contracts, 622
Queens, Wheal, 416

R.

Royal Santiago Mining Company, 5, 333, 336, 345
Rose, East Wheal, 5
Remington, and his Aërial Bridge, 11
Richardson on Mine Accidents, 14
Rotary-engine, Stenson's Emission, 83; Scotthorn's, 386, 390. 411, 435; Radley, 470, 555; Fitzmaurice, 439, 469; Schnebley, 427, Ramsay's Newcastle Cannel Coal, 90 [518
Roskear, South, 30
Railways, on—Statistics, 21, 26; America, 198; Sleepers and Chairs, Greaves's, 36, 526; Opened in 1848, 26; Sundry Notices of, 26, 27, Coupling, Wrighton's Patent, 39; Lane's, 343; in United States, 43; Accidents, 50, 113; Mechanics' Institution at Rugby, 50; Breakes, 51, 243; Conveyance of Cattle by, 51; Float on the Frith of Forth, Launch of, 64, 415; Bridge, Rider's, 70; Blackwall, 234; Shares, Registration of, 75; Passengers' Signal Lamp, Hattersby, 90, 108; Taxation, Local, 90, 187, 241; Laing, 111; Calls, Amount of, 102; Ireland, 116, 250, 253; Signal Telegraph, Brotherton, 116; Denmett, 126; South Western, 128; Torrop's, 183; Coggan's Water, 254; Colgrave, 565; *v.* Mines, "Placer" and "Engineer" on, 120, 218, 230, 241, 254, 266, 278, 327, 350; Casualty Compensation Company, 130, 142, 190; Arches for Destitute Persons, 133; Economy, Light Engines, 166; Competition, What the Public Gain by, 166; Cultivation of Waste Lands of, 194; Law, 199; Chairs and Switches, Improved, Baines, 222; Reed's, 337; Wheels, Improved, Smith's, 222, 241; Wharton, 301; Baker, 331; Kelner, 526; Permanent Way, Construction of, 222, 234; Commissioners' Report, 234; Buffers, Improved, 243; Compensation Case, 344, 406; Mineral Traffic, Value of, 254; Girders, 263; Economy, 269; Worked by Contract, 216, 241, 253, 268, 279, 291; Charges and Parcels, 279; Passengers' Assurance Company, 286, 378, 510, 541, 555, 598; Prodigality, 291, 2 2, 315, 327; and Free Trade, 302; *Accounts, Uniformity of* (review), 39; Traffic, Statistics of, 310; Transit, Economy of, 522; Axles, M'Connell on, 322; Thorneycroft's, 531, 541, 599, 566, 614; rails, 535; Sleepers, Iron, 526, 575; Carriages, Communication between, while in Motion, 526; Stores, Amount of, 528; Receipts and Increase, 556; Arches, Fall of, at Camden Town, 558; Carriage Bearings, Brandt's, 565; Employment of Women on, 565; Officials, Reckless Negligence of, 589; Contrasts, 598; Travelling, Extraordinary Dispatch in, 601; in Collieries, Origin of, 613; Over Mountains, 315, 330; Bridge Destroyed by Fire, 346; Capital, New, 351; Rails, Manufacture of, 363; Bagatelles, 366; Guage in Australia, 378; Propulsion, Thompson's New, 365, 399; Companies, Winding-Up, 394; Liable for Accidents, 427; in Prussia, 439; in Russia, 463; in South Australia, 490; Jobling, 469; Bridge at Cologne, 486; Bridges *v.* Human Skulls, 503; Reynolds's Improvements, 493; Barlow's, 613; Rails, Oxidation of, In and Out of Use, 474
Rattlesnake, the, Dr. Murray on, 59
Royal Scottish Society of Arts, 94, 127
Russell, Wheal, 104
Royal Institution, 112, 198, 234
Russia, Metallic Produce of, 154
Rumnaford Coombe Tin Mine, 166, 249, 260, 476, 574
Reath, Wheal, Tin Mine, 166
Royal Mail Steam-Packet Company, 181
Rights of the Crown, Port Colliery, 210
Recipes for Varnishes, Cements, &c., 211, 255, 279, 294
Richardson's Improvements in Manufacture of Metal Tubes, 217
Rocks Tin Mine, 233
Rays of Sun, Action on Steel Balance, 218, 231
Real del Monte Mining Company, 290, 298
Royal College of Chemistry, 270
Royal Mechanic, a, 277
Rhondda Valley, 301
Red Rain, Fall of, 344
Royal Thames Steam Navigation Company, 346
Russian Bullion, 416
Rogers on Management of Iron-Works, 433, 446, 458, 469, 481
Rainbow, the, 451
Robins, Wheal, 466, 502
Royal Cornwall Polytechnic Society, 472, 474
Royal Geological Society of Cornwall, 491
Rugby, Warwick, and Worcester Railway, 559
Resources of the British Empire (Review), 577
Royal Thames Steam Navigation Company, 582
Regents Canal Company, 589
Railways of the United Kingdom, by H. Scrivenor (review), 279
Railways, Past and Present Views of, by Gordon (review), 294
Railways, Statistics of, by Miller (review), 294
Railway Accounts, Uniformity of (reviews), 39, 282
Railway Locomotion and Steam Navigation, by Curr (review) 62,
Railways and Shareholders (review), 246
Railway Audit, &c. (Scrivener and Whitehead's Pamphlets), 541
Railway Curves, Tables for Setting-out, by Kennedy (review), 415
Railways and Railway Accounts, by Webb (review), 343
Railway Travellers' Magazine (Review), 366

S.

South Australian Company, 3, 34, 306
Sisters, Wheal, 5, 53
South Wales Mining Company, 6, 574
Shipwreck, Safety from, Murray on, 10
Steam-Engine Improvements, on, 10, 11; Stenson's, 111; Burrow's, 259; Penn's, 295; Urwin's, 343, 354; Semi-Gravitating, 403; Miniature, 579 [Thompson's, 483
Smelting, on, 11, 22, 34, 46, 58, 71, 106, 310, 327, 338, 351, 353; St. Lawrence Colliery, Important law case, 16
Sadler's Patent Balance Bridge, 21
South Devon Railway, 21, 35, 88, 337, 332
Steam-Engine Dynamometer, M'Naughton's, 26 [27
Steele, Thomas Ennis, Memoir of, at Institution of Civil Engineers,
Scythe Manufactory, Large, in America, 27
St. Katharine Dock Company, 27, 344
South Australia, Mining in, 32, 44, 45, 190, 235; Railways in, 113
Sentry Box, Improvements in, 33
Streets, Machine for Cleansing, 34
South Australia: its Resources and Advantages (review), 38
Slowe Catalogue, the, 50
Swansea Dock Company, 50, 550; Harbour Trust, 283
Signal Lamp for Shipping, 50 [gium, 577
Salt, Production and Consumption of, in France, 59; Tax, 90; Belt-South Tamar Silver-Lead Mines, 64, 433, 596, 609
Sulphuric Acid, Constituents of, 69
Smith *v.* Kernick, Colliery Case at Law, 74
South Wales Coal-Field, 74
Sophia, Wheal, 78
Sheffield and Manchester Railway, Woodhead Tunnel, 86
South Wheal Basset, 88, 536, 554
Stray Park and Camborne Vean Mines, 89, 297, 550
Steam-Engine, Important Invention for Stopping the, 91; Condensors on, Weston's, 94, 140 [Thorneycroft, 427
Shrewsbury and Birmingham Railway Preference Shares, 95, 432,
Safety-Lamp, on the, 170, 218; Crane, 98, 122; Horsley, 134, 146, 158, 170; Shepherd, 146; Hopkins, 146? Biram, 439; Miners' Opinion of, 623
Sligo and Shannon Railway, 99
South Australian Banking Company, 99, 306
Southampton Docks, the, 99, 575
St. Ives Consols, 101, 128
Sterling and Dunfermline Railway, Comrie Den Viaduct, 105
South Australia, Guide to, Chauncy's (review) 113
Society of Arts, 127, 144, 145, 147, 186, 192, 267; Prizes, 283
Spearne Consols Mine Company, 146, 224, 238
Smelting Improvements, in, Penny, 119, 120; South Australia, 156, 214; Parke's, 255; Pelton's, 382; Vivian's, 387
Saw Filing and Setting Machine, 127
Southern and Western Mining Company of Ireland, 130, 154, 226
Suffocation, Narrow Escape from, 132, 147 [374, 402
South Australia, Dispatches from, 145, 155; Mining in, 310, 262,
Smith, Andrew, New Rope Machinery, 132, 235
Snow Storm, Protection of the Eyes in, 134
Statistics of Coal, by R. Taylor (review), 145, 283
Sunderland, New Docks at, 150; Riots at, 466
South Australian Mining Association, 163, 369
South Wheal Trelawny, 166
Silver Ores, Reduction of, 158; Birkmyre's, 170
Seton, Wheal, 178, 189, 286, 297, 490, 501, 597
Steam, Improvements in Generating, 178, 187
Stone for Building, 178
St. Ana Mine, New Granada, 182, 194
Speed, Wheal, 190
Scientific Societies' Exemption Bill, 270
South American Mines, 194
Scottish Provident Mutual Assurance Institution, 199
Stannaries' Court, the, 215
Steel, Improvements in Manufacture of, 217
Swivel Bridge, Improvements in, 217
Silver, &c., Cleaning Articles of, 219
South Wheal Frances, 266, 321, 430
Smoke, Consumption of, 234, 291, 351; A. Smith, 362; Godson, 373; Dircks, 374, 399, 415; Collins, 375; Hall, 599
St. John del Rey Mining Company, 241, 273, 309, 318, 333, 337, 370, 378; Routh, 382, 405; Petition, 537, 453, 444, 550, and further Numbers
Suffocation, Deaths at Miss Mann's from, 242
Solicitors' and General Life Assurance Society, 259
Spanish Tariff, New, 265
Slate Rocks, Nature and Properties of, 279, 302
Summer Beverages, Masters's, 282
Soda Trade, the, 284
Steam, High-Pressure in Marine Engines, on, 294
Steam-Engine Tenders, Caution to, 300
Silver, Chloride of, Reduction of, 318
Sea, Fire, and Life Assurance Society, 337
Smelting Establishment, New, in Wales, 358; ditto at Briton Ferry, Bankart's Patent, 358
Steam Generator, Andrew Smith's, 362; Power of England, 378
Ship Canal between the St. Lawrence and Lake Champlain, 380
Seton, West Wheal, 382, 574
Slave-Holding Companies, 402, 453
Sophia, Wheal, 405
Sewage, Dunn's Plan for Purifying, 411, 422; Darlington's, 435
Suspension Bridge over the Dnieper, 414
Steam-Ship Building Experiments, 447
Steam-Engines, Supplying with Water, 450
South Wales Coal-Field, Moses's, 471
Safety Valve, Improved, 475
Saw Set, Improved, 475
Stoke Climsland, Strata of, 486
St. Just, Mining in, 501, 512
Scottish Amicable Assurance Company, 511
Salt Spring in a Coal Mine, 512
Safety Fuse, on, 529, 555, 566, 591, 603, 614
Smelter *v.* Miner, 529
Swansea, Toll on Coal at, 565
Southend Pier, Old, 570, 582
Sambre and Meuse Railway, 574
South Molton Consols Mine, 586
South Wheal Josiah, 596
St. Lawrence and Atlantic Railway, 598
Smoke Intercepted, 623
Shareholders, Mining, a few Hints to, 619
Science in the Manufacture of Iron, 623

T.

Trelawny, Wheal, 341, 225, 374, 381, 518, 549
Trelawny, South Wheal, 3, 77
Tolgus, South Wheal, 17, 596
Tincroft Mines Company, 29, 175, 490, 582
Trehane, Wheal, 28, 53, 154, 262, 393, 501, 548, 619
Trevisksy and Barrier Mines, 41, 42, 142, 349, 370, 405, 562, 579
Treasury, Wheal, 41
Toad in Granite, 47, 59, 71
Thames Steam-Boats, 51
Tregorden Mining Company, 53, 153, 262, 393, 514, 574
Treavean Mining Company, 54, 154, 370, 466
Trethellan Mining Company, 54, 154, 466
Texas, Gold Region, Ancient City, &c., 60
Timber, Reduction of Duty on, to Mining Purposes, 65
Tavistock District, the, 65, 89, 476, 513
Tennant's Paper at Society of Arts, on Gold of California, 74
Timber Tracks, on Common Roads, 82, 87, 95, 107, 126, 479, 482
Timber Preserving Company, 99
Tremayne, Wheal, Mining Company, 101, 202, 297, 597
Turnpike Trusts, Statistics on, 107
Thames Tunnel Company, 114
Trenance Mining Company, 105, 502
Tubes, Manufacture of, Improvements in, 138; Metal, 217, 230, 242, 255, 279, 366, 279; law case, 342; Cutler, 427
Telegraphic Communication for the Million, 139
Tredegar Iron-Works, 158
Terrestrial Magnetism, Hopkins on, 157, 171, 181, 193, 219
Turpentine, Sweet Oil of, 166, 307
Tin, Statistics of, 168
Turf, Carbonisation of, 200
Tar from Coal, New Preparation of, 202
Transfer of Mining Property, Stamps, 224, 238, 249, 260, 277, 294; Toll *v.* Lee, 308, 318; Forms, 346, 395
Trenouth Delabole Slate Quarry, 308
Trescoll, Wheal, Explosion, 238, 249, 260, 274
Thorneycroft's Proposal to Test Iron, 253, 255, 262, 274, 427; Tests, 491, 495
Type for Printing, Improvement in Material of, 258
Tuyeres for Forges, Improvements in, 274
Tywarnhale and Nancekuke Mines, 285
Tavistock Consols Mining Company, 286
Tin Bounds, on the Custom of, 296
Trevean Mining Company, 297
Trewalder Mining Company, 297, 381
Tidal Rivers, on Obstructions in, 308
Times Life Assurance and Guarantee Company, 342
Tavy Consols Mining Company, 381, 476, 597
Tin Trade in the 17th Century, 400
Tin Mine, Cost and Produce of Working, 405
Tubular Wooden Bridges, Original, 406
Tempering Tools, Improvements in, 411
Terrific Theory, 414
Tremenheere's Report on Mining Districts, 414
Tide-Winding Apparatus, Patent, 451
Ticketings, Synopsis of Cornish, since 1800, and Swansea, 1815; 474
Treleigh Consols Mining Company, 476, 490
Tamar Consols Silver-Lead Mining Company, 489
Tontine Life Assurance, 498
Toronto and Lake Huron Railroad, 502
Telegraph Posts, Improved, 505
Ticketing for Ores, Origin, 514
Tariff, American, 517
Talacre Mining Company, 538
Trethevy Mining Company, 563, 586
Telelegraph Company, a New, 618; Wires, Fractures of, 623

U.

United Mexican Mining Company, 30, 33, 116, 348, 356, 442
Union Bank of Australia, 38, 344
United States, Imports and Exports of, 57
Universal Life Assurance Company, 282
Union Bank of London, 332
Undulations in Coal Mines, Accumulation of Gas in, 350

V.

Venice, Bombardment of, by Balloons, 34
Vincent, Wheal, 78, 286, 393
Von Rathen, Baron, Compressed Air Locomotive, 88, 120
Virtuous Lady and Bedford Mines, 619
Ventilation of Mines, by Steam, 47; Struve's, 57, 69, 71, 121, 134, 210, 603; Gurney, 105, 106, 113, 134, 145, 146, 158, 182, 183; Dunn, 81, 145, 146, 193; Sutcliffe, 94; Hopkins, 134, 140; Dodd, 194, 203; Edginton, 234; New Bill, 287; Leaders on, 288, 312; "Coal," 314; Richardson, 314; Duncombe's Bill Withdrawn, 318; Gunpowder Experiment, 374; Dr. Clowne, 438; Piping, 386; "J. R." on Colwell, 494, 507, 522; Gordon, 507, 519; Sheddon, 611; Colwell, 563, 586, 610, and future Nos.
Voltaic Ignition, Grove on, 112
Veneer-Cutting Machinery, 134
Van Diemen's Land Company, 126, 150, 166, 250, 375, 473
Victoria Iron-Works, 166, 190
Ventilation, Mueseler's Lamp, 189; of Public Buildings, 186
Varnishes and Cements, Recipes for, 211
Van Couver's Island, Coal at, 215
Visual Impression on the Retina, 242
Valves and Cocks, Improvements in, 260
Venezuela, Gold and Silver Mines of, 333
Ventilation of a Colliery, Stopping the, 342; of the London Sewers, 350
Viatners' Company, Extracts of Charters (review), 355
Ventilation of Houses, Ships, and Carriages, 362
Ventilation by Perforated Glass, 397
Voltaic Arrangements, Comparative Cost of Various, 451
Valve-Cock, Improved, 519
Valley of Lootchen Mining Company, 575, 586

W.

Watson's Compendium of British Mining, 3, 16, 29, 40, &c. 52-64-7
Weardale Iron Ore, the, 11, 22
Water Wheels, on, 15, 34; Curr on, 122
Wicklow Gold Deposits, 15
West of England Steel Company, 16, 35, 60
Wood Carving by Machinery, 26
West United Hills Mining Company, 53
Waterford, Wexford, and Wicklow Railway, 64
West Trethellan Mine, 65, 466
West Cornwall Railway, 76, 286
Working Man's Hand Book to South Australia (review), 87
Wheel-rigged Ship, 83, 88
Windsor Railway, the, 99
Western Australia, Mining in, 90
Window Sash, Improved, 99, 442
White Lead, Improvements in Manufacture of, 99
Whudden Wheal, 104
Wilkins's Lecture on Electricity, 113, 127
West Tolgus Mining Company, 114
Wood, Destruction of, 126
Wellington Mines, 130, 237, 393, 586
Water, Supply of pure to large Towns, Murray on, 132, 212, 487 518, 535, 542, 603
Whishaw's Telekouphonon, 133; Telegraph Exhibition, 349, 403
Worthing Mining Company, the, 141
West Wheal Treasury, 166, 262, 501
Washing Preparation, Twelvetrees', 176
Western Australia, Mining Explorations in, 190
Watering Streets, Extinguishing Fires, 194, 206
Walter, Wheal, 202
West Wheal Buller, Watson on, 212, 546
Water for Steam Boilers, Importance of good, 218, 230
Whitworth Colliery, Bankruptcy, 230
West Wheal Jewel Mine, 237
Water Pressure Engine, 243, 267
Werdinsky's Motive Power, in various Nos.
Water, Spherical Nature of, 258
Water, Fresh from Salt, M'Bride's Patent, 262, 298
Wire Rope, a Large, 277; Origin of, 460
Wire-work for Plastered Ceilings, 307
Water, Damming Back, 315; Preservation of, 402; Calcareous Deposit in, 339, 356; Solubility of Lead in, 351
West Downs Mining Company, 357, 466, 574
Window Shutters, Improved Iron, 367
Water, Pollution of, by Washing Ores, 372
Wales, Holdworth's Principality of, 379, 391, 403, 415; Crown Property in, 385, 399
Williams, John, Esq., of Burmoose, Death of, 394
Windsor Railway, 406, 490
Wright's Steam Generator, 187, 427, 440, 444, 471
Wood, Duration of, and Preservaties, 451
Wind Machine for Mines, 476
Water, Injection to Condenser of Steam-engines, Improved, 476
Waste Lands, Employment of Convict Labour on, 264, 456, 492, 496
Water Meter, Self-acting, 519
Welsh Colliery Case, Duke of Beaufort *v.* Morris, 192, 453, 595, 606
Winding-up of Joint-stock Companies, 583
Window Duty, Dr. Murray on, 555
Wisbeach, Peterborough, &c., Railway, 559
Wolverstan, James, Esq., Testimonial to, 563
Walker's Coal Riddle, 591
Water, Horsley's Specification for Purifying, 519, 529, 601
Waterproof Cloth or Silk, French, 594
Wednesbury, Insecure State of, 623

Y.

Year Book of Facts (review), 76
York and North Midland Railway, 241, 435

Z.

Zinc, Wheal, 238
Zinc, Importation of Foreign, 262; Oxide of, as a Pigment, 466